

**In the Claims**

Applicants submit herewith a marked-up version of the claims. Entry of the amendments is requested:

- (1) Please withdraw, without prejudice, claims 35-43 and claims 77-128;
- (2) Please amend claims 1, 28, and 54 as shown on the marked-up versions of the claims; and
- (3) Please cancel claims 22, 27, 50, 53, 76

The submitted marked-up versions of the claims follows standard amendment rules, wherein added text has been underlined and deleted text has been bracketed. The status of each claim is additionally provided.

**Remarks to Amended Claims**

Applicants have submitted amendments to claims 1, 28, and 54 to include a third element (C) that provides "a pump that pumps said therapeutic protein formulation through said implantable catheter system to at least one targeted region, wherein the pump provides for a programmable delivery rate of the therapeutic protein formulation, and wherein the delivery rate is selected based on factors selected from the group consisting of specific neurological disease, genetic sequence of the patient's gene encoding for the protein to be delivered, body weight, and combinations thereof."

The added amendment to claims 1, 28, and 54 is fully supported because it incorporates the limitations found in dependent claims 22, 27, 50, 53, and 76 which are fully supported through out the specification. Incorporation of the limitations of dependent claims 22, 27, 50, 53, and 76 necessitated their cancellation.